

STATE OF VERMONT
PUBLIC SERVICE BOARD

Docket No. 6704

Petition of Vermont Electric Cooperative, Inc.)	
for a waiver of the prohibition against site)	
preparation for and construction of transmission)	
facilities prior to the issuance of a certificate of)	Hearing at
public good (in re: emergency installation of a)	Montpelier, Vermont
larger transformer at the Johnson Substation,)	June 3, 2002
located in Johnson, Vermont))	

Order entered: 6/3/2002

PRESENT: Peter B. Meyer, Hearing Officer

APPEARANCES: Aaron Adler, Esq.
for the Vermont Department of Public Service

Michael L. Burak
Burak, Anderson & Melloni, PC
for Vermont Electric Cooperative, Inc.

I. INTRODUCTION

On May 31, 2002, the Public Service Board ("Board") received a petition pursuant to 30 V.S.A. § 248 (k) from Vermont Electric Cooperative, Inc. ("VEC"), seeking a waiver of Section 248's general prohibition against site preparation and construction of electric transmission facilities without Board preapproval. The subject of the requested waiver is the emergency replacement of a transformer at VEC's substation in Johnson, Vermont.

The petition was served on the governmental bodies required to receive notice pursuant to 30 V.S.A. Section 248 (a)(4)(C) on May 31, 2002. The Board appointed me as Hearing Officer to conduct the preliminary hearing on the request for a waiver, and to prepare a Proposal for Decision in this Docket. An expedited preliminary hearing was held as scheduled on June 3, 2002, after providing notice to the petitioner and governmental bodies specified in subsection (a)(4)(C) of 30 V.S.A. § 248. At the hearing, VEC presented evidence in support of its request for a waiver. No party appeared in opposition to the petition, and all parties waived the opportunity to comment on this Proposal for Decision in accordance with 3 V.S.A. § 811.

II. FINDINGS OF FACT

Based on the evidence of record and the testimony presented at the expedited preliminary hearing, I hereby report the following findings to the Board in accordance with 30 V.S.A. § 8.

1. Vermont Electric Cooperative, Inc. is a duly organized company subject to the jurisdiction of the Board with its principal place of business at 182 School Street, Johnson, Vermont. Petition.

2. VEC owns and operates a 34.5/12.47/7.2 kV distribution substation on Upper French Road in Johnson, Vermont. The substation serves VEC's members in the towns of Johnson, Hyde Park, Morrisville and Stowe. Abendroth pf. at 1-2. The Johnson Substation has three single-phase transformers to reduce the voltage level from 34.5 kV to 7.2 kV. One of the three transformers is rated at 833 kVA and serves the "A" phase of the substation; the other two transformers are rated at 333 kVA and serve the "B" and "C" phases of the substation. Abendroth pf. at 2.

3. The petition requests the Board to grant a waiver for the prohibition against site preparation and construction without Board approval with respect to the replacement of one of the two existing 333 kVA transformers with a larger transformer rated at 833 kVA. Abendroth pf. at 2. VEC is in the process of preparing a petition pursuant to 30 V.S.A. §248 (j) for the replacement of both 333 kVA transformers. However, in light of the circumstances outlined herein, it has become necessary and desirable to replace one of the two transformers more expeditiously than would be allowed in that process. Pet. at 2; Abendroth pf. at 3-4.

4. The present 333 kVA substation transformers are 33 years old. Due to load growth in the area over the last 33 years, these transformers are now operating at or above rated capacity for much of the year. VEC has been able to defer replacement of these transformers for several years by shifting loads to the larger 833 kVA transformer; however, this strategy is no longer a viable option due to the physical configuration of the distribution system. Abendroth pf. at 3.

5. Routine inspections of the Johnson Substation have identified an increasing trend in transformer operating temperature that is beyond the normal variations in operating temperature due to weather and load. On May 30, 2002, the temperature of the "B" phase transformer was 54 degrees Centigrade; the "C" phase transformer temperature was 36

degrees Centigrade. The ambient temperature at the time of these observations was 21.1 degrees Centigrade. Two days before, the temperature of the "B" phase transformer was 48 degrees Centigrade at approximately the same ambient temperature. Both transformers are presently carrying about the same load. Abendroth pf. at 3.

6. VEC is concerned that if a waiver of the requirements of 30 V.S.A. § 248 is not granted with respect to the "B" phase transformer, that transformer may fail, thereby, causing an outage and, possibly, environmental harm. Abendroth pf. at 3.

7. VEC had scheduled an outage for routine maintenance at the Johnson Substation on June 4, 2002, before the present operating problem was observed on the "B" phase transformer. In order to assure adequate and reliable service in the area, VEC proposes to replace the "B" phase transformer during this outage. Abendroth pf. at 4.

8. VEC has an 833 kVA "B" phase transformer that was acquired for inventory in 2001 at a cost of \$13,400. VEC does not have an operable spare 333 kVA transformer that could be installed as a replacement "in-kind" for the existing "B" phase transformer. For the required capacity of VEC's Johnson Substation, transformer manufacturers presently offer single-phase substation transformers rated at 333 kVA and 833 kVA. Replacement "in-kind" with 333 kVA transformers would not address the capacity problem. Abendroth pf. at 4.

9. All construction work will be limited to the use of a crane to remove the existing transformer from its foundation and to place the new transformer on the existing foundation. Installation work, crane rental and transportation costs are estimated at less than \$10,000. VEC personnel will do all work, except for operation of the crane, and an allocation of their salaries has been included in the estimated costs. Abendroth pf. at 4-5.

10. Mr. Abendroth's prefiled testimony addresses all of the statutory criteria for the issuance of a certificate of public good for the replacement of both transformers. This testimony reveals no adverse impacts under any of these statutory criteria, but if there were to be any such adverse impacts, they could be readily mitigated by the removal of the larger transformer and installation of a transformer of the same size as the original. Abendroth pf. at 1-11; 6/3/02 transcript.

11. VEC gave notice to the governmental bodies listed in 30 V.S.A. § 248(a)(4)(C) by regular mail and fax and/or email on May 31, 2002. Petition at 4.

III. DISCUSSION

The evidence presented in the petition and at the preliminary hearing demonstrates that the criteria of Section 248(k) have been met for issuance of the requested waiver for the installation of the larger replacement transformer. Specifically, the evidence shows that the deteriorated condition of the transformer is an emergency situation, that the waiver is necessary to provide adequate and efficient service, and that the waiver will promote the general good of the state. The Vermont Department of Public Service supports issuance of the waiver.

Consequently, I recommend that the Board grant the requested waiver of the prohibition against site preparation and construction of electric transmission facilities for the replacement of the transformer. I further recommend that the Board include in the waiver the conditions set forth in the attached proposed order, which I conclude are necessary to protect the interests of Vermont utilities and their ratepayers.

DATED at Montpelier, Vermont, this 3rd day of June, 2002.

s/Peter B. Meyer
Peter B. Meyer
Hearing Officer

IV. ORDER

IT IS HEREBY ORDERED, ADJUDGED AND DECREED by the Public Service Board of the State of Vermont that, pursuant to 30 V.S.A. § 248 (k), the prohibition of 30 V.S.A. § 248 (a)(2) against site preparation for and construction of the replacement transformer at the Johnson Substation by Vermont Electric Cooperative, Inc. in Johnson, Vermont, prior to the issuance of a certificate of public good, is waived, subject to the following conditions:

1. The transformer shall be installed in accordance with the plans and testimony submitted by the petitioner in this proceeding.
2. VEC shall file, within one week of the date of this Order, a petition for a certificate of public good authorizing the replacement of two transformers at its substation in Johnson, Vermont

DATED at Montpelier, Vermont, this 3rd day of June, 2002.

<u>s/Michael H. Dworkin</u>)	PUBLIC SERVICE
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<u>s/David C. Coen</u>)	BOARD OF VERMONT
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<u>s/John D. Burke</u>)	

OFFICE OF THE CLERK

FILED: June 3, 2002

ATTEST: s/Susan M. Hudson
Clerk of the Board

NOTICE TO READERS: This decision is subject to revision of technical errors. Readers are requested to notify the Clerk of the Board (by e-mail, telephone, or in writing) of any apparent errors, in order that any necessary corrections may be made. (E-mail address: Clerk@psb.state.vt.us)